



Demand Analysis Working Group

2025 Transportation Forecast Assumptions and Framing

Andre Freeman, Supervisor, Transportation Energy Forecasting Unit
August 18, 2025



Acronyms, Initialisms, and Abbreviations

AATE – Additional Achievable Transportation Electrification

ACF – Advanced Clean Fleets Regulations

ACC2 – Advanced Clean Cars II Regulations

BEV – Battery Electric Vehicle

CARB – California Air Resources Board

CEC – California Energy Commission

DMV – Department of Motor Vehicles

EIA – U.S. Energy Information Administration

FZ – Forecast Zone

IEPR – Integrated Energy Policy Report

LD – Light-Duty

MDHD – Medium- and Heavy-Duty

MPGe – Miles per gallon equivalent

NTD – National Transit Database

PA – (Utility) Planning Area

PHEV – Plug-in Hybrid Electric Vehicle

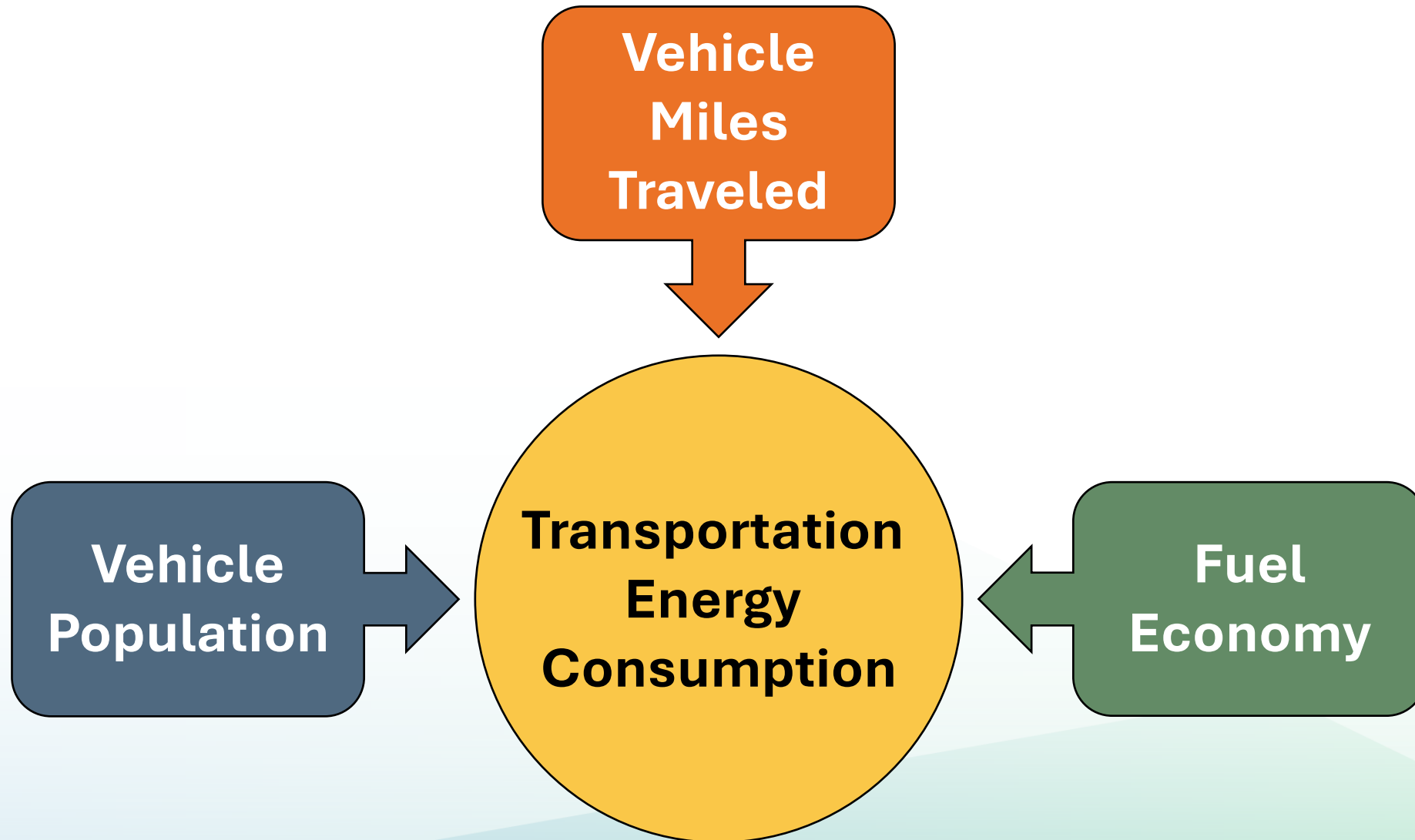
TE – Transportation Electrification

VMT – Vehicle Miles Traveled

ZEV – Zero-Emission Vehicle



Transportation Energy Consumption







Transportation Electrification Scenarios

- The **Baseline forecast** represents a projection of the vehicle market based on continuing trends and existing policies.
- **Additional Achievable Transportation Electrification (AATE) Scenarios** above the baseline are used for integration of policies that existing demand-side models cannot readily account for.
- AATE 2, AATE 3, AATE 4 scenarios are managed forecasts that post-process some vehicle fuel types to align with sales proportions or population proportions stipulated by regulations like Advanced Clean Cars II, Advanced Clean Trucks, and other future supply-side regulations.



Additional Achievable Transportation Electrification Scenarios

- AATE 2 – Accounts for uncertainty in policy/regulatory areas that may lead to increased but moderate growth of ZEV population
- AATE 3 – Scenario based on recent policies and can be used to guide utility infrastructure investments and resource planning
- AATE 4 – Incorporates a high-end projection of the number of vehicles that result from recent aspirational policies and goals



Executive Order N-27-25

- Reaffirms the state's commitment to ZEV deployment
- Initiates the development of Advanced Clean Cars III regulation
- Updates state purchasing requirements to align with manufacturers that continue complying with clean car regulations
- Prioritizes funding for state incentive programs for clean manufacturers and fleets
- Continues Clean Truck Partnership work
- Directs state agencies to assess additional actions for ZEV adoption and issue recommendations within 60 days, including strategies for consumer protection, infrastructure, voluntary efforts, and local partnerships



2024 IEPR Forecast Transportation Electrification Scenarios

		Major TE Annual Components	
Forecast Case	TE Name	Light-Duty	MDHD
Baseline Forecast	Baseline	Baseline	Baseline
Planning Scenario	AATE 3	ACC2	ACF



Draft 2025 IEPR Forecast Transportation Electrification Scenarios

		Major TE Annual Components	
Potential Forecast Case	TE Name	Light-Duty	MDHD
Baseline	Baseline	Baseline	Baseline
TBD	AATE 2	Moderate Growth	Baseline
Planning Scenario	AATE 3	High Growth	Baseline
Local Reliability Scenario	AATE 4	High Growth	High Growth

Key Updates

- Additional Scenarios to Reflect Policy Uncertainty
- Economic and Demographic Updates
- Removal of Federal Tax Credits
- Updates to Vehicle Stock and Specific Attributes



Considerations for 2026 and Beyond

- New Policies Resulting from Executive Order N-27-25
- Tariff Impacts and Associated Vehicle Price Data
- Findings from 2024/2025 California Vehicle Survey
- Updated TE Load Shapes
- Improved Forecast Zone Energy Assignments
- Autonomous Vehicle Projections

Thank You!



Andre Freeman
Supervisor
Transportation Energy Forecasting Unit
Energy Assessments Division
andre.freeman@energy.ca.gov